pronotum; epistoma not depressed, strongly constricted between antennal cavities, feebly, broadly emarginate in front. Antenna extending to base of pronotum, sparsely clothed with long, erect, whitish hairs; first and second joints globose, subequal in length; third joint narrow, longer than second; fourth and fifth joints subequal in length to the third, and expanded toward apices; the following joints shorter, subequal in length, slightly triangular, the last joint oval, equal in length to the tenth, and broadly rounded at apex.

Pronotum strongly, uniformly convex, one-third wider than long, slightly wider at base than at apex, widest near middle; sides strongly, arcuately narrowed anteriorly, subparallel at middle, obliquely narrowed posteriorly; when viewed from the side the submarginal carina is distinct, feebly sinuate, the marginal carina only indicated near the base; anterior margin and base transversely truncate; surface rather densely, coarsely punctate. Scutellum very small and oval.

Elytra as wide as pronotum at base; sides parallel from base to apical fourth, then arcuately narrowed to the tips, which are separately broadly rounded; humeri not prominent; disk moderately convex, narrowly, deeply, transversely depressed along base; surface rather densely, coarsely, irregularly punctate, and somewhat rugose.

Abdomen beneath strongly convex, densely granulose, sparsely, coarsely punctate, and clothed with a few indistinct hairs; suture between the first and second segments entirely obliterated; last segment very broadly rounded at apex. Prosternum moderately convex, densely granulose, rather densely, coarsely punctate; anterior margin broadly, feebly, arcuately emarginate or subtruncate; prosternal process rather narrow, the sides parallel, and broadly subtruncate at apex. Femora moderately robust. Tibiae straight and slender.

Length, 1.75 mm .; width, 0.72 mm .

## Type locality.-Guanica, Puerto Rico.

Type.-Cat. No. 50800, U. S. National Museum.
Described from a single specimen collected at the type locality in the Bovinguen Forest Reservation, October 17, 1934, by R. G. Oakley (San Juan No. 5856).

This species is allied to oakleyi Fisher, but it can be easily distinguished from that species by its color, and in having the elytra ornamented with violaceous black spots, the marginal carina on each side of the pronotum obliterated anteriorly, and the elytra deeply depressed along the base.

## TWO NEW ELMIDAE FROM PUERTO RICO WITH DESCRIPTION OF NEW GENUS (COLEOPTERA). ${ }^{1}$

By Paul N. Musgrave, Fairmont, W. Va.

In a shipment of Elmidae sent me from Puerto Rico by Professor Stuart T. Danforth, two new species were found. The descriptions of the two species, as well as that of a new genus, follows:

Cyllocpus danforthi, new species.
FEMALE-General.-Form elongate, subparallel; dull black with a dark reddish-brown tinge (dark burnt sienna), the elytra slightly lighter than the pronotum; femora, tibiae, abdomen ind apical joints of antennae and palpi, yellowish rufous. Length 1.8 mm . Greatest width, across elytra, about 0.8 mm . Head opaque, surface granular, inserted in the prothorax to the eyes, which are not prominent. Antennae filiform, 11-jointed, the first two joints dull, the last three slightly enlarged, shining, and with long, sparse pubescence. The eleventh joint somewhat flattened with il tuft of whitish pubescence on the pointed apex. Pronotum almost as long as wide, widest about $1 / 3$ from base, sides broadly rounded, basal margin sinuate, apical margin moderately extended with acute lateral angles. Pronotum with a median longitudinal groove beginning at the base but not reaching the apex, deepest about half way to apex and limited at the base by two short carinae; also with two complete lateral carinae, which vary in width and are more or less parallel with the crenate lateral margins (Fig. 1-B); disk dull, almost granulate, with short, sparse pubescence arising from minute punctures separated by about four times their own diameters. Legs.-Femora and tibiae granular, hind tibiae each with an oblong area of long, silky pubescence. Elytra at base a little broader than the pronotum, almost twice as long as broad, granular, finely and sparsely pubescent; intervals two, three, five and seven with granular costae, those of two and three short, those of five and seven continuing until they meet just short of the apex. Abdomen granulate, everywhere sparsely covered with short, silky pubescence.

MALE-Slightly smaller (length 1.6 mm .) but otherwise externally similar to female. Genitalia-Fig. 1-A.

Type locality.-Rio Cañas, Las Marias, Puerto Rico.
Types.-Holotype (female), allotype (male) and four paratypes to be sent to the U. S. National Museum; ten paratypes to Professor Stuart T. Danforth, for whom the species is named; two paratypes each to P. J. Darlington, Jr., Milton W. Sanderson, Howard Hinton, and the Canadian National Collection at Ottawa. Several paratypes remain in the collection of the writer. All types were collected either on Jan. 3, 1933, or May 9, 1931.

Notes.-This species is very closely ' related to quadrata Darlington and ferruginea Horn, but may easily be separated from them by the color of the pronotum, being black in danforthi and ferrugineus in quadrata and ferruginca. The inner elytral striae are very evident all the way to the apex in the latter species while they practically disappear on the apical third in danforthi. There are other differences but these will suffice for the ready separation of the three species.

[^0]NEOELMIS, new genus.
Form elongate, slender, moderately convex. Head received deeply in the prothorax; the eyes nude, distant, somewhat coarscly faceted; antennate slender, ahmost reaching the base of the prothorax, widely distant, 11 -jointed, first two and last three slightly enlarged, the eleventh heing largest of all and carrying a tuft of pubescence on its pointed tip; maxillary palpi 4 -jointed, the first minute, the inner apical angle of the fourth, truncate. Pronothm subquadrate, with two entire longitudinal carinace, one located near each lateral margin; and also with a deep transverse impression placed a little beyond the middle, disk regularly convex within the lateral carinae. Elytra-Margins parallel for basal $2 / 3$, then gradually converging to apex. Legs long and slender, front tibiae each with an area of short, silky pubescence, on the inside, at the apex. Middle and hind femora, with short spines, similarly placed.

GENO'TYPE-Neoelmis sracilis, new species.
This genus may be separated from all other nearctic Elmidae by the sculpture of the pronotum. All other genera having entire lateral carinae either do not have the transverse impression, or if it is present, the disk near the base is not regularly convex, but has one or more oblique furrows. At least three species placed in Elmis (Helmis) belong to Neoolmis, namelv. caesa LeConte (Texas), minima Darlington (Cuba) and apicalis Sharp (Mexico). The object in establishing this genus is to reduce by one, the number of distinct forms found in the genus Elmis Latr.


A


B


C


F
lig. 1.

Neoelmis gracilis, new species.
FEMALE-General Form elongate (Fig. 1-C), parallel, opaque, dark reddish-brown; legs, apical joints of antennae, palpi, lighter with a yellowish cast. Length 1.4 mm ., greatest width across elytra, 0.5 mm . Head-Front dull brownish-black with long silvery pubescence, sparsely placed; clypeus ferrugineus; antennae 11 -jointed (Fig. 1-D), obscurely bicolored, the middle area of joints $1-10$ and the apical $5 / 6$ of 11 , yellowish, the remaining surface ferrugineus, eleventh joint pointed and with a tuft of long whitish pubescence at apex; maxillary palpi 4-jointed (Fig. 1-E), the fourth truncate. Pronotum slightly longer than broad, widest about $1 / 3$ from base; lateral margins regularly rounded and finely crenate, basal margin sinuate, apical margin between lateral carinae only moderately produced, apical angles acute; disk uniformly dull, granulate, with a deep median transverse impression and a pair of complete sublateral carinae paralleling the lateral margins. Elytra-Lateral margins subparallel for the first $2 / 3$, then converging to apex; sparsely pubescent with rows of punctures which tend to disappear on apical third, punctures separated by about their own diameters on basal third, striae scarcely impressed, fifth interval carinate almost to apex. Legs moderately stout, tarsi long, slender and with small curved claws. Ventral surface granular; prosternum with a circular depression each side in front of coxae, prosternal process about as broad as greatest diameter of front femora.

MALE-Fxternally similar to female. Genitalia Fig. 1-F.

## Type locality.-Rio Cañas, Las Marias, Puerto Rico.

Types.-Holotype (female), allotype (dissected male) and four paratypes to be sent to the U. S. National Museum, at Washington. Thirty additional paratypes located as noted above under the description of C. danforthi Musgrave. All types were collected either on Jan. 3, 1933, or May 9, 19.31.

## Key for Genus Neoelmis Musgrave.

1. Both apical and basal portions of pronotal disk shining, not granulate.. .... 2

2. Testaceous; punctures of basal third of elytra inconspicuous caesa LeConte Fusco-ferrugineus; punctures of basal third of elytra large and deep....... apicalis Sharp
3. Both apical and basal portions of pronotal disk dull, granulate. gracilis Musgrave
Apical half of pronotal disk smooth, shining, basal half dull, granulate.. minima Darlington

Figure 1. A. Male genitalis of Cylloepus danforthi Musgrave. B. Pronotum of C. danforthi. C. Neoelmis gracilis Musgrave. D. Antenna, E. Max. palpus, and F. Male genitalia of N. gracilis. Outline drawings for plate made by the author.


[^0]:    ${ }^{1}$ Contribution from Department of Entomology, West Virginia University, Morgantown, West Virginia.

